

# Occupational Safety and Health Admin., Labor

# Pt. 1910, Subpt. L, App. B

steam pressure, or electrical continuity of circuitry may be used to continuously monitor the system to assure it is operational

and to identify trouble in the system and give a warning signal.

[45 FR 60715, Sept. 12, 1980; 46 FR 24557, May 1, 1981]

## APPENDIX B TO SUBPART L OF PART 1910—NATIONAL CONSENSUS STANDARDS

The following table contains a cross-reference listing of those current national consensus standards which contains information and guidelines that would be considered acceptable in complying with requirements in the specific sections of subpart L.

| Subpart L section       | National consensus standard  |
|-------------------------|--|
| 1910.156 .....          | ANSI/NFPA No. 1972; Structural Fire Fighter's Helmets.<br>ANSI Z88.5 American National Standard, Practice for Respirator Protection for the Fire Service.<br>ANSI/NFPA No. 1971, Protective Clothing for Structural Fire Fighters.<br>NFPA No. 1041, Fire Service Instructor Professional Qualifications.  |
| 1910.157 .....          | ANSI/NFPA No. 10, Portable Fire Extinguishers.   |
| 1910.158 .....          | ANSI/NFPA No. 18, Wetting Agents.<br>ANSI/NFPA No. 20, Centrifugal Fire Pumps.<br>NFPA No. 21, Steam Fire Pumps.<br>ANSI/NFPA No. 22, Water Tanks.<br>NFPA No. 24, Outside Protection.<br>NFPA No. 26, Supervision of Valves.<br>NFPA No. 13E, Fire Department Operations in Properties Protected by Sprinkler, Standpipe Systems.<br>ANSI/NFPA No. 194, Fire Hose Connections.<br>NFPA No. 197, Initial Fire Attack, Training for.<br>NFPA No. 1231, Water Supplies for Suburban and Rural Fire Fighting. |
| 1910.159 .....          | ANSI-NFPA No. 13, Sprinkler Systems.<br>NFPA No. 13A, Sprinkler Systems, Maintenance.<br>ANSI/NFPA No. 18, Wetting Agents.<br>ANSI/NFPA No. 20, Centrifugal Fire Pumps.<br>ANSI/NFPA No. 22, Water Tanks.<br>NFPA No. 24, Outside Protection.<br>NFPA No. 26, Supervision of Valves.<br>ANSI/NFPA No. 72B, Auxiliary Signaling Systems.<br>NFPA No. 1231, Water Supplies for Suburban and Rural Fire Fighting.   |
| 1910.160 .....          | ANSI/NFPA No. 11, Foam Systems.<br>ANSI/NFPA 11A, High Expansion Foam Extinguishing Systems.<br>ANSI/NFPA No. 11B, Synthetic Foam and Combined Agent Systems.<br>ANSI/NFPA No. 12, Carbon Dioxide Systems.<br>ANSI/NFPA No. 12A, Halon 1301 Systems.<br>ANSI/NFPA No. 12B, Halon 1211 Systems.<br>ANSI/NFPA No. 15, Water Spray Systems.<br>ANSI/NFPA 16 Foam-Water Spray Systems.<br>ANSI/NFPA No. 17, Dry Chemical Systems.<br>ANSI/NFPA 69, Explosion Suppression Systems.                              |
| 1910.161 .....          | ANSI/NFPA No. 11B, Synthetic Foam and Combined Agent Systems.<br>ANSI/NFPA No. 17, Dry Chemical Systems.   |
| 1910.162 .....          | ANSI/NFPA No. 12, Carbon Dioxide Systems.<br>ANSI/NFPA No. 12A, Halon 1211 Systems.<br>ANSI/NFPA No. 12B, Halon 1301 Systems.<br>ANSI/NFPA No. 69, Explosion Suppression Systems.  |
| 1910.163 .....          | ANSI/NFPA No. 11, Foam Extinguishing Systems.<br>ANSI/NFPA No. 11A, High Expansion Foam Extinguishing Systems.<br>ANSI/NFPA No. 11B, Synthetic Foam and Combined Agent Systems.<br>ANSI/NFPA No. 15, Water Spray Fixed Systems.<br>ANSI/NFPA No. 16, Foam-Water Spray Systems.<br>ANSI/NFPA No. 18, Wetting Agents.<br>NFPA No. 26, Supervision of Valves.   |
| 1910.164 .....          | ANSI/NFPA No. 71, Central Station Signaling Systems.<br>ANSI/NFPA No. 72A, Local Protective Signaling Systems.<br>ANSI/NFPA No. 72B, Auxiliary Signaling Systems.<br>ANSI/NFPA No. 72D, Proprietary Protective Signaling Systems.<br>ANSI/NFPA No. 72E, Automatic Fire Detectors.<br>ANSI/NFPA No. 101, Life Safety Code.  |
| 1910.165 .....          | ANSI/NFPA No. 71, Central Station Signaling Systems.<br>ANSI/NFPA No. 72A, Local Protective Signaling Systems.<br>ANSI/NFPA No. 72B, Auxiliary Protective Signaling Systems.<br>ANSI/NFPA No. 72C, Remote Station Protective Signaling Systems.<br>ANSI/NFPA No. 72D, Proprietary Protective Signaling Systems.<br>ANSI/NFPA No. 101, Life Safety Code.  |
| Metric Conversion ..... | ANSI/ASTM No. E380, American National Standard for Metric Practice.  |

NFPA standards are available from the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

ANSI Standards are available from the American National Standards Institute, 1430 Broadway, New York, NY 10018.

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#### APPENDIX C TO SUBPART L OF PART 1910—FIRE PROTECTION REFERENCES FOR FURTHER INFORMATION

I. *Appendix general references.* The following references provide information which can be helpful in understanding the requirements contained in all of the sections of subpart L:

A. *Fire Protection Handbook*, National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

B. *Accident Prevention Manual for Industrial Operations*, National Safety Council; 425 North Michigan Avenue, Chicago, IL 60611.

C. Various associations also publish information which may be useful in understanding these standards. Examples of these associations are: Fire Equipment Manufacturers Association (FEMA) of Arlington, VA 22204 and the National Association of Fire Equipment Distributors (NAFED) of Chicago, IL 60601.

II. *Appendix references applicable to individual sections.* The following references are grouped according to individual sections contained in subpart L. These references provide information which may be helpful in understanding and implementing the standards of each section of subpart L.

A. § 1910.156. *Fire brigades:*

1. *Private Fire Brigades*, NFPA 27; National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

2. *Initial Fire Attack, Training Standard On*, NFPA 197; National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

3. *Fire Fighter Professional Qualifications*, NFPA 1001; National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

4. *Organization for Fire Services*, NFPA 1201; National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

5. *Organization of a Fire Department*, NFPA 1202; National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

6. *Protective Clothing for Structural Fire Fighting*, ANSI/NFPA 1971.

7. *American National Standard for Men's Safety-Toe Footwear*, ANSI Z41.1; American National Standards Institute, New York, NY 10018.

8. *American National Standard for Occupational and Educational Eye and Face Protection*, ANSI Z87.1; American National Standards Institute, New York, NY 10018.

9. *American National Standard, Safety Requirements for Industrial Head Protection*, ANSI Z89.1; American National Standards Institute, New York, NY 10018.

10. *Specifications for Protective Headgear for Vehicular Users*, ANSI Z90.1; American Na-

tional Standards Institute, New York, NY 10018.

11. *Testing Physical Fitness*; Davis and Santa Maria, *Fire Command*, April 1975.

12. *Development of a Job-Related Physical Performance Examination for Fire Fighters*; Dotson and Others. A summary report for the National Fire Prevention and Control Administration, Washington, DC. March 1977.

13. *Proposed Sample Standards for Fire Fighters' Protective Clothing and Equipment*; International Association of Fire Fighters, Washington, DC.

14. *A Study of Facepiece Leakage of Self-Contained Breathing Apparatus by DOP Man Tests*; Los Alamos Scientific Laboratory, Los Alamos, NM.

15. *The Development of Criteria for Fire Fighters' Gloves; Vol. II: Glove Criteria and Test Methods*; National Institute for Occupational Safety and Health, Cincinnati, OH. 1976.

16. *Model Performance Criteria for Structural Fire Fighters' Helmets*; National Fire Prevention and Control Administration, Washington, DC. 1977.

17. *Firefighters*; Job Safety and Health Magazine, Occupational Safety and Health Administration, Washington, DC. June 1978.

18. *Eating Smoke—The Dispensable Diet*; Utech, H.P. The Fire Independent, 1975.

19. *Project Monoxide—A Medical Study of an Occupational Hazard of Fire Fighters*; International Association of Fire Fighters, Washington, DC.

20. *Occupational Exposures to Carbon Monoxide in Baltimore Firefighters*; Radford and Levine. Johns Hopkins University, Baltimore, MD. Journal of Occupational Medicine, September, 1976.

21. *Fire Brigades*; National Safety Council, Chicago, IL. 1966.

22. *American National Standard, Practice for Respiratory Protection for the Fire Service*; ANSI Z88.5; American National Standards Institute, New York, NY 10018.

23. *Respirator Studies for the Nuclear Regulatory Commission; October 1, 1977—September 30, 1978. Evaluation and Performance of Open Circuit Breathing Apparatus*. NU REG/CR-1235. Los Alamos Scientific Laboratory; Los Alamos, NM. 87545, January, 1980.

B. § 1910.157. *Portable fire extinguishers:*

1. *Standard for Portable Fire Extinguishers*, ANSI/NFPA 10; National Fire Protection Association, Batterymarch Park, Quincy, MA 02269.

2. *Methods for Hydrostatic Testing of Compressed Gas Cylinders, C-1*; Compressed Gas Association, 1235 Jefferson Davis Highway, Arlington, VA 22202.